



Waste Management of Hawaii, Inc.
92-460 Farrington Highway
Kapolei, Hawaii 96707
808-668-2985

VIA US. MAIL & E-MAIL

U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
Attn: Lawrence Torres (WTR-7)

Hawaii Department of Health
Clean Water Branch
P.O. Box 3378
Honolulu, HI 96801-3378
Attn: Scott Miyashiro

RE: **Issuance of Findings of Violation and Order for Compliance for Waimanalo Gulch Sanitary Landfill — CWA-309(a)-12-003**
Monthly Report of Stormwater Sampling and Analysis — August 2015

Dear Sirs:

Pursuant to Paragraph 15 of the November 29, 2011, Finding of Violation and Order ("Order") in the above referenced matter, Waste Management of Hawaii, Inc. ("WMH") is hereby submitting its monthly report for August 2015 of all sampling and analysis required by Paragraphs 12-14. The following table summarizes the information required:

Dates of discharges from the WGSL or detention basin	Did representative sampling and analysis of the discharges occur?	Analytical report attached?
August 24, 2015	Yes	Yes

I certify under penalty of law that this document and all attachments (if any) were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Damon De Frates
Waste Management of Hawaii, Inc.

cc: via e-mail only
David Wampler — EPA Region 9
Dana Viola — City & County of Honolulu
File

ANALYTICAL REPORT

Job Number: 280-73538-2

Job Description: 995|Waimanalo Gulch LF

For:
Waste Management
BU1046-Kirby Canyon RDF
PO BOX 1870
Morgan Hill, CA 95038
Attention: Mr. Edward Pettit



Approved for release.
Betsy A Sara
Project Manager II
9/18/2015 4:14 PM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
09/18/2015

cc: Mr. Mark Hofferbert
Ms. Margie Thach

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002

Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com



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CASE NARRATIVE

Client: Waste Management

Project: 995|Waimanalo Gulch LF

Report Number: 280-73538-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The sample was received on 08/27/2015; the sample arrived in good condition, properly preserved and on ice. The temperatures of the cooler at receipt were 1.6°C and 5.9°C.

Holding Times

Method 218.6 requires samples to be preserved to a pH in the range of 9.3-9.7. The sample WGSL-DB01E / WGSL-DB01W was preserved by TA Honolulu to a pH of 9.41 on 8/24/15, however TA Irvine recorded a pH value of 9.24 on 9/3/15. The sample was further preserved to the appropriate pH in the laboratory and data was flagged with H qualifier. The client was notified.

All other holding times were met.

Method Blanks

All Method Blanks were within established control limits.

Laboratory Control Samples (LCS)

All Laboratory Control Samples were within established control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

The method required MS/MSD could not be performed for Method 625 and Method 1664A due to insufficient sample volume, however, LCS/LCSD pairs were analyzed to demonstrate method precision and accuracy.

The percent recoveries and/or relative percent difference of the MS/MSD performed on a sample from another client were outside control limits for Total Iron Method 200.7 because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Total Mercury Method 245.1. In addition, the RPD result was outside the RPD limit for Total Mercury. Because the corresponding Laboratory Control Samples and the Method Blank samples were within control limits, these anomalies may be due to matrix interference and no corrective action was taken.

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Ammonia Method 350.1. Because the corresponding Laboratory Control Samples and the Method Blank samples were within control limits, these anomalies may be due to matrix interference and no corrective action was taken.

The Matrix Spikes and Matrix Spike Duplicates performed on samples from other clients exhibited recoveries outside control limits for Total Kjeldahl Nitrogen (TKN) Method 351.2. Because the corresponding Laboratory Control Samples and the Method Blank samples were within control limits, these anomalies may be due to matrix interference and no corrective action was taken.

The percent recoveries and/or relative percent difference of the MS/MSD performed on sample WGSL-DB01E / WGSL-DB01W were outside control limits for Total Phosphorus Method 365.1 because the sample concentration was greater than four times the spike amount. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, no corrective action was taken.

All other MS and MSD samples were within established control limits.

Sample Duplicate

The Method 2540D Sample Duplicate performed on a sample from another client exhibited an RPD that exceeded the limit for Total Suspended Solids (TSS), and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Metals

The Method 245.1 Continuing Calibration Verification (CCV) sample was above the control limits for Total Mercury. Because the data are considered biased high and Total Mercury was not detected in the associated sample above the reporting limit, corrective action was deemed unnecessary.

General Comments

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

For samples requiring analysis at a dilution, the dilution factor has been multiplied by the Method Detection Limit (MDL) for each analyte and evaluated versus the project-specific reporting limit (PSRL). If the obtained value is below the PSRL, then the PSRL is preserved as the reporting limit for the diluted result, otherwise, the obtained value becomes the reporting limit. This is done in order to maintain the PSRL to meet permit requirements at the request of the client and to report the lowest possible RL for each analyte.

The analysis for Biochemical Oxygen Demand (BOD) was performed by TestAmerica Honolulu. Their address and phone number are:
TestAmerica Honolulu
1946 Young Street
Suite 400A
Honolulu, HI 96826
Phone: 808.486.5227

The analysis for Hexavalent Chromium was performed at TestAmerica's Irvine facility.
TestAmerica Irvine
17461 Derian Avenue
Suite 100
Irvine, CA 92614
Phone: 949.261.1022

EXECUTIVE SUMMARY - Detections

Client: Waste Management

Job Number: 280-73538-2

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-73538-2	WGSL-DB01E / WGSL-DB01W					
Mercury	0.00011	J ^		0.00020	mg/L	245.1
Ammonia	0.022	J		0.10	mg/L	350.1
Nitrogen, Kjeldahl	1.2			0.50	mg/L	351.2
Nitrate Nitrite as N	2.5			0.10	mg/L	353.2
Phosphorus, Total	2.7			0.050	mg/L	365.1
Chemical Oxygen Demand	43			20	mg/L	410.4
Total Suspended Solids	610			14	mg/L	SM 2540D
Nitrogen, Total	3.7			0.10	mg/L	Total Nitrogen
<i>Total Recoverable</i>						
Cadmium	0.0013	J		0.0050	mg/L	200.7 Rev 4.4
Iron	46			0.10	mg/L	200.7 Rev 4.4
Lead	0.020			0.0090	mg/L	200.7 Rev 4.4
Selenium	0.0052	J		0.015	mg/L	200.7 Rev 4.4
Zinc	0.16			0.020	mg/L	200.7 Rev 4.4

METHOD SUMMARY

Client: Waste Management

Job Number: 280-73538-2

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Semivolatile Organic Compounds (GC/MS) Liquid-Liquid Extraction	TAL DEN TAL DEN	40CFR136A 625 40CFR136A 625	
Metals (ICP) Preparation, Total Recoverable Metals	TAL DEN TAL DEN	EPA 200.7 Rev 4.4 EPA 200.7	
Mercury (CVAA) Preparation, Mercury	TAL DEN TAL DEN	EPA 245.1 EPA 245.1	
HEM and SGT-HEM HEM and SGT-HEM (SPE)	TAL DEN TAL DEN	1664A 1664A 1664A 1664A	
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
Nitrogen, Total Kjeldahl Nitrogen, Total Kjeldahl	TAL DEN TAL DEN	MCAWW 351.2 MCAWW 351.2	
Nitrogen, Nitrate-Nitrite	TAL DEN	MCAWW 353.2	
Phosphorus, Total Phosphorus, Total	TAL DEN TAL DEN	EPA 365.1 MCAWW 365.2/365.3/365	
COD	TAL DEN	MCAWW 410.4	
Solids, Total Suspended (TSS)	TAL DEN	SM SM 2540D	
Nitrogen, Total	TAL DEN	EPA Total Nitrogen	
General Sub Contract Method	TAL HON	Subcontract	
Chromium, Hexavalent (Ion Chromatography) Sample Filtration, Field	TAL IRV	EPA 218.6 FIELD_FLTRD	

Lab References:

TAL DEN = TestAmerica Denver

TAL HON = TestAmerica Honolulu

TAL IRV = TestAmerica Irvine

Method References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

METHOD / ANALYST SUMMARY

Client: Waste Management

Job Number: 280-73538-2

Method	Analyst	Analyst ID
40CFR136A 625	Hoefer, Alexandra F	AFH
EPA 200.7 Rev 4.4	Trudell, Lynn-Anne M	LMT
EPA 245.1	Kelly, Cara M	CMK
1664A 1664A	Shiring, Amy R	ARS
MCAWW 350.1	Lawrence, Caitlyn M	CML
MCAWW 351.2	Woolley, Mark -	MW1
MCAWW 353.2	Newcome, Robin S	RSN
EPA 365.1	Schwemin, Andrew J	AJS
MCAWW 410.4	Jewell, Connie C	CCJ
SM SM 2540D	Woolley, Mark -	MW1
EPA Total Nitrogen	Allen, Andrew J	AJA
EPA 218.6	Welch, Raquel	RW

SAMPLE SUMMARY

Client: Waste Management

Job Number: 280-73538-2

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-73538-2	WGSL-DB01E / WGSL-DB01W	Water	08/24/2015 0940	08/27/2015 0940

SAMPLE RESULTS

Analytical Data

Client: Waste Management

Job Number: 280-73538-2

Client Sample ID: W GSL-DB01E / W GSL-DB01W

Lab Sample ID: 280-73538-2

Date Sampled: 08/24/2015 0940

Client Matrix: Water

Date Received: 08/27/2015 0940

625 Semivolatile Organic Compounds (GC/MS)

Analysis Method:	625	Analysis Batch:	280-293958	Instrument ID:	SMS_Y
Prep Method:	625	Prep Batch:	280-292940	Lab File ID:	Y5251.D
Dilution:	1.0			Initial Weight/Volume:	1049.9 mL
Analysis Date:	09/09/2015 0209			Final Weight/Volume:	1 mL
Prep Date:	08/31/2015 1325			Injection Volume:	0.5 uL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Alpha-Terpineol	ND		0.0019	0.010
Benzoic acid	ND		0.0095	0.050
p-Cresol	ND		0.00024	0.010
Pentachlorophenol	ND		0.019	0.060
Phenol	ND		0.0019	0.010

Surrogate	%Rec	Qualifier	Acceptance Limits
2,4,6-Tribromophenol	97		16 - 147
2-Fluorobiphenyl	97		43 - 120
2-Fluorophenol	105		16 - 136
Nitrobenzene-d5	97		52 - 120
Phenol-d5	107		11 - 145
Terphenyl-d14	52		10 - 145

Analytical Data

Client: Waste Management

Job Number: 280-73538-2

Client Sample ID: W GSL-DB01E / W GSL-DB01W

Lab Sample ID: 280-73538-2

Client Matrix: Water

Date Sampled: 08/24/2015 0940

Date Received: 08/27/2015 0940

218.6 Chromium, Hexavalent (Ion Chromatography)-Dissolved

Analysis Method:	218.6	Analysis Batch:	440-277989	Instrument ID:	IC-22
	N/A	Prep Batch:	N/A	Lab File ID:	440-0062518-016.d
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2104			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Analyte		Result (ug/L)	Qualifier	MDL	RL
Chromium, hexavalent		ND	H	0.25	1.0

Analytical Data

Client: Waste Management

Job Number: 280-73538-2

Client Sample ID: W GSL-DB01E / W GSL-DB01W

Lab Sample ID: 280-73538-2

Date Sampled: 08/24/2015 0940

Client Matrix: Water

Date Received: 08/27/2015 0940

200.7 Rev 4.4 Metals (ICP)-Total Recoverable

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-293461	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-293170	Lab File ID:	26b090215.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/02/2015 1950			Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	0.0013	J	0.00045	0.0050
Iron	46		0.022	0.10
Lead	0.020		0.0026	0.0090
Zinc	0.16		0.0045	0.020
Silver	ND		0.00093	0.010

Analysis Method:	200.7 Rev 4.4	Analysis Batch:	280-293766	Instrument ID:	MT_026
Prep Method:	200.7	Prep Batch:	280-293170	Lab File ID:	26a090415.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/04/2015 1734			Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Selenium	0.0052	J	0.0049	0.015

245.1 Mercury (CVAA)

Analysis Method:	245.1	Analysis Batch:	280-294585	Instrument ID:	MT_034
Prep Method:	245.1	Prep Batch:	280-294320	Lab File ID:	150911bb.txt
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	09/11/2015 1740			Final Weight/Volume:	50 mL
Prep Date:	09/11/2015 1000				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.00011	J ^	0.000027	0.00020

Analytical Data

Client: Waste Management

Job Number: 280-73538-2

General Chemistry**Client Sample ID:** W GSL-DB01E / W GSL-DB01W

Lab Sample ID: 280-73538-2

Date Sampled: 08/24/2015 0940

Client Matrix: Water

Date Received: 08/27/2015 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
HEM	ND		mg/L	1.7	5.0	1.0	1664A
	Analysis Batch: 280-294576		Analysis Date: 09/11/2015 2243				
	Prep Batch: 280-294542		Prep Date: 09/11/2015 1703				
Ammonia	0.022	J	mg/L	0.022	0.10	1.0	350.1
	Analysis Batch: 280-293226		Analysis Date: 09/01/2015 2029				
Nitrogen, Kjeldahl	1.2		mg/L	0.18	0.50	1.0	351.2
	Analysis Batch: 280-294572		Analysis Date: 09/11/2015 1924				
	Prep Batch: 280-294405		Prep Date: 09/10/2015 1934				
Nitrate Nitrite as N	2.5		mg/L	0.019	0.10	1.0	353.2
	Analysis Batch: 280-294191		Analysis Date: 09/09/2015 1543				
Phosphorus, Total	2.7		mg/L	0.025	0.050	5.0	365.1
	Analysis Batch: 280-293174		Analysis Date: 09/01/2015 1809				
	Prep Batch: 280-293112		Prep Date: 09/01/2015 1329				
Chemical Oxygen Demand	43		mg/L	4.1	20	1.0	410.4
	Analysis Batch: 280-292918		Analysis Date: 08/31/2015 0945				
Total Suspended Solids	610		mg/L	14	14	1.0	SM 2540D
	Analysis Batch: 280-292749		Analysis Date: 08/28/2015 1622				
Nitrogen, Total	3.7		mg/L	0.042	0.10	1.0	Total Nitrogen
	Analysis Batch: 280-295143		Analysis Date: 09/16/2015 1125				

DATA REPORTING QUALIFIERS

Client: Waste Management

Job Number: 280-73538-2

Lab Section	Qualifier	Description
GC/MS Semi VOA	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
HPLC/IC	H	Sample was prepped or analyzed beyond the specified holding time
Metals	A	Instrument related QC is outside acceptance limits.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	F2	MS/MSD RPD exceeds control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry	F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-292940					
LCS 280-292940/2-A	Lab Control Sample	T	Water	625	
LCSD 280-292940/3-A	Lab Control Sample Duplicate	T	Water	625	
MB 280-292940/1-A	Method Blank	T	Water	625	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	625	
Analysis Batch: 280-293958					
LCS 280-292940/2-A	Lab Control Sample	T	Water	625	280-292940
LCSD 280-292940/3-A	Lab Control Sample Duplicate	T	Water	625	280-292940
MB 280-292940/1-A	Method Blank	T	Water	625	280-292940
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	625	280-292940

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-293170					
LCS 280-293170/2-A	Lab Control Sample	R	Water	200.7	
MB 280-293170/1-A	Method Blank	R	Water	200.7	
280-73538-2	WGSL-DB01E / WGSL-DB01W	R	Water	200.7	
280-73540-F-1-B MS	Matrix Spike	R	Water	200.7	
280-73540-F-1-C MSD	Matrix Spike Duplicate	R	Water	200.7	
Analysis Batch: 280-293461					
LCS 280-293170/2-A	Lab Control Sample	R	Water	200.7 Rev 4.4	280-293170
MB 280-293170/1-A	Method Blank	R	Water	200.7 Rev 4.4	280-293170
280-73538-2	WGSL-DB01E / WGSL-DB01W	R	Water	200.7 Rev 4.4	280-293170
280-73540-F-1-B MS	Matrix Spike	R	Water	200.7 Rev 4.4	280-293170
280-73540-F-1-C MSD	Matrix Spike Duplicate	R	Water	200.7 Rev 4.4	280-293170
Analysis Batch: 280-293766					
LCS 280-293170/2-A	Lab Control Sample	R	Water	200.7 Rev 4.4	280-293170
MB 280-293170/1-A	Method Blank	R	Water	200.7 Rev 4.4	280-293170
280-73538-2	WGSL-DB01E / WGSL-DB01W	R	Water	200.7 Rev 4.4	280-293170
280-73540-F-1-B MS	Matrix Spike	R	Water	200.7 Rev 4.4	280-293170
280-73540-F-1-C MSD	Matrix Spike Duplicate	R	Water	200.7 Rev 4.4	280-293170
Prep Batch: 280-294320					
LCS 280-294320/2-A	Lab Control Sample	T	Water	245.1	
MB 280-294320/1-A	Method Blank	T	Water	245.1	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	245.1	
280-73838-B-1-K MS	Matrix Spike	T	Water	245.1	
280-73838-B-1-L MSD	Matrix Spike Duplicate	T	Water	245.1	
Analysis Batch: 280-294585					
LCS 280-294320/2-A	Lab Control Sample	T	Water	245.1	280-294320
MB 280-294320/1-A	Method Blank	T	Water	245.1	280-294320
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	245.1	280-294320
280-73838-B-1-K MS	Matrix Spike	T	Water	245.1	280-294320
280-73838-B-1-L MSD	Matrix Spike Duplicate	T	Water	245.1	280-294320

Report Basis

R = Total Recoverable

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-292749					
LCS 280-292749/1	Lab Control Sample	T	Water	SM 2540D	
MB 280-292749/2	Method Blank	T	Water	SM 2540D	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	SM 2540D	
680-116168-E-9 DU	Duplicate	T	Water	SM 2540D	
Analysis Batch:280-292918					
LCS 280-292918/3	Lab Control Sample	T	Water	410.4	
LCSD 280-292918/4	Lab Control Sample Duplicate	T	Water	410.4	
MB 280-292918/5	Method Blank	T	Water	410.4	
280-73537-D-1 MS	Matrix Spike	T	Water	410.4	
280-73537-D-1 MSD	Matrix Spike Duplicate	T	Water	410.4	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	410.4	
Prep Batch: 280-293112					
LCS 280-293112/3-A	Lab Control Sample	T	Water	365.2/365.3/365	
MB 280-293112/4-A	Method Blank	T	Water	365.2/365.3/365	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	365.2/365.3/365	
280-73538-2MS	Matrix Spike	T	Water	365.2/365.3/365	
280-73538-2MSD	Matrix Spike Duplicate	T	Water	365.2/365.3/365	
Analysis Batch:280-293174					
LCS 280-293112/3-A	Lab Control Sample	T	Water	365.1	280-293112
MB 280-293112/4-A	Method Blank	T	Water	365.1	280-293112
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	365.1	280-293112
280-73538-2MS	Matrix Spike	T	Water	365.1	280-293112
280-73538-2MSD	Matrix Spike Duplicate	T	Water	365.1	280-293112
Analysis Batch:280-293226					
LCS 280-293226/110	Lab Control Sample	T	Water	350.1	
LCSD 280-293226/111	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-293226/112	Method Blank	T	Water	350.1	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	350.1	
280-73564-C-7 MS	Matrix Spike	T	Water	350.1	
280-73564-C-7 MSD	Matrix Spike Duplicate	T	Water	350.1	
Analysis Batch:280-294191					
LCS 280-294191/104	Lab Control Sample	T	Water	353.2	
LCSD 280-294191/22	Lab Control Sample Duplicate	T	Water	353.2	
MB 280-294191/105	Method Blank	T	Water	353.2	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	353.2	
280-73538-2MS	Matrix Spike	T	Water	353.2	
280-73538-2MSD	Matrix Spike Duplicate	T	Water	353.2	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-294405					
LCS 280-294405/1-A	Lab Control Sample	T	Water	351.2	
LCSD 280-294405/2-A	Lab Control Sample Duplicate	T	Water	351.2	
MB 280-294405/3-A	Method Blank	T	Water	351.2	
280-73497-D-1-B MS	Matrix Spike	T	Water	351.2	
280-73497-D-1-C MSD	Matrix Spike Duplicate	T	Water	351.2	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	351.2	
Prep Batch: 280-294542					
LCS 280-294542/1-A	Lab Control Sample	T	Water	1664A	
LCSD 280-294542/2-A	Lab Control Sample Duplicate	T	Water	1664A	
MB 280-294542/3-A	Method Blank	T	Water	1664A	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	1664A	
Analysis Batch:280-294572					
LCS 280-294405/1-A	Lab Control Sample	T	Water	351.2	280-294405
LCSD 280-294405/2-A	Lab Control Sample Duplicate	T	Water	351.2	280-294405
MB 280-294405/3-A	Method Blank	T	Water	351.2	280-294405
280-73497-D-1-B MS	Matrix Spike	T	Water	351.2	280-294405
280-73497-D-1-C MSD	Matrix Spike Duplicate	T	Water	351.2	280-294405
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	351.2	280-294405
Analysis Batch:280-294576					
LCS 280-294542/1-A	Lab Control Sample	T	Water	1664A	280-294542
LCSD 280-294542/2-A	Lab Control Sample Duplicate	T	Water	1664A	280-294542
MB 280-294542/3-A	Method Blank	T	Water	1664A	280-294542
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	1664A	280-294542
Analysis Batch:280-295143					
MB 280-295143/1	Method Blank	T	Water	Total Nitrogen	
280-73538-2	WGSL-DB01E / WGSL-DB01W	T	Water	Total Nitrogen	

Report Basis

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Analysis Batch:440-277989					
LCS 440-277989/2	Lab Control Sample	T	Water	218.6	
MB 440-277989/3	Method Blank	T	Water	218.6	
280-73538-I-1 MS	Matrix Spike	D	Water	218.6	
280-73538-I-1 MSD	Matrix Spike Duplicate	D	Water	218.6	
280-73538-2	WGSL-DB01E / WGSL-DB01W	D	Water	218.6	

Report Basis

D = Dissolved

T = Total

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Surrogate Recovery Report**625 Semivolatile Organic Compounds (GC/MS)****Client Matrix: Water**

Lab Sample ID	Client Sample ID	TBP %Rec	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPH %Rec
280-73538-2	WGSL-DB01E / WGSL-DB01W	97	97	105	97	107	52
MB 280-292940/1-A		81	90	103	92	104	99
LCS 280-292940/2-A		102	95	102	98	106	104
LCSD 280-292940/3-A		99	96	106	102	107	102

Surrogate	Acceptance Limits
TBP = 2,4,6-Tribromophenol	16-147
FBP = 2-Fluorobiphenyl	43-120
2FP = 2-Fluorophenol	16-136
NBZ = Nitrobenzene-d5	52-120
PHL = Phenol-d5	11-145
TPH = Terphenyl-d14	10-145

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-292940

Method: 625

Preparation: 625

Lab Sample ID:	MB 280-292940/1-A	Analysis Batch:	280-293958	Instrument ID:	SMS_Y
Client Matrix:	Water	Prep Batch:	280-292940	Lab File ID:	Y5230.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/08/2015 1651	Units:	mg/L	Final Weight/Volume:	1 mL
Prep Date:	08/31/2015 1325			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Alpha-Terpineol	ND		0.0020	0.010
Benzoic acid	ND		0.010	0.050
p-Cresol	ND		0.00025	0.010
Pentachlorophenol	ND		0.020	0.060
Phenol	ND		0.0020	0.010

Surrogate	% Rec	Acceptance Limits
2,4,6-Tribromophenol	81	16 - 147
2-Fluorobiphenyl	90	43 - 120
2-Fluorophenol	103	16 - 136
Nitrobenzene-d5	92	52 - 120
Phenol-d5	104	11 - 145
Terphenyl-d14	99	10 - 145

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-292940**

Method: 625

Preparation: 625

LCS Lab Sample ID:	LCS 280-292940/2-A	Analysis Batch:	280-293958	Instrument ID:	SMS_Y
Client Matrix:	Water	Prep Batch:	280-292940	Lab File ID:	Y5231.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/08/2015 1718	Units:	mg/L	Final Weight/Volume:	1 mL
Prep Date:	08/31/2015 1325			Injection Volume:	0.5 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-292940/3-A	Analysis Batch:	280-293958	Instrument ID:	SMS_Y
Client Matrix:	Water	Prep Batch:	280-292940	Lab File ID:	Y5232.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/08/2015 1745	Units:	mg/L	Final Weight/Volume:	1 mL
Prep Date:	08/31/2015 1325			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
1,2,4-Trichlorobenzene	71	74	44 - 120	5	35	
1,2-Dichlorobenzene	70	76	32 - 120	8	42	
1,3-Dichlorobenzene	69	72	23 - 120	4	47	
1,4-Dichlorobenzene	69	73	24 - 120	5	49	
2,2'-Oxybis(1-chloropropane)	85	87	37 - 120	2	30	
2,4,6-Trichlorophenol	84	86	51 - 120	2	30	
2,4-Dichlorophenol	82	85	46 - 120	3	30	
2,4-Dimethylphenol	71	70	44 - 119	2	35	
2,4-Dinitrophenol	83	86	20 - 121	3	61	
2,4-Dinitrotoluene	90	89	57 - 120	2	35	
2,6-Dinitrotoluene	88	87	56 - 120	1	30	
2-Chloronaphthalene	79	79	60 - 118	1	30	
2-Chlorophenol	86	88	34 - 120	2	30	
2-Methylphenol	86	88	38 - 120	1	35	
2-Nitrophenol	83	85	47 - 120	2	30	
3,3'-Dichlorobenzidine	79	75	18 - 120	5	50	
4,6-Dinitro-2-methylphenol	87	87	40 - 120	0	55	
4-Bromophenyl phenyl ether	83	81	53 - 120	3	34	
4-Chloro-3-methylphenol	86	85	57 - 120	0	30	
4-Chlorophenyl phenyl ether	81	80	51 - 120	1	30	
4-Nitrophenol	90	90	53 - 120	1	42	
Acenaphthene	82	80	47 - 120	3	30	
Acenaphthylene	80	78	33 - 120	3	30	
Anthracene	85	82	52 - 120	3	30	
Benzidine	29	27	10 - 218	5	50	
Benzo[a]anthracene	91	89	54 - 120	2	30	
Benzo[a]pyrene	88	83	39 - 120	5	73	
Benzo[b]fluoranthene	90	89	51 - 120	1	90	
Benzo[g,h,i]perylene	88	87	48 - 120	1	64	
Benzo(k)fluoranthene	96	92	49 - 120	4	50	
Bis(2-chloroethoxy)methane	85	85	50 - 120	1	30	
Bis(2-chloroethyl)ether	86	87	35 - 120	2	30	
Bis(2-ethylhexyl) phthalate	90	91	56 - 120	0	30	
Butyl benzyl phthalate	90	89	53 - 120	0	30	
Chrysene	92	91	51 - 120	1	30	
Dibenz(a,h)anthracene	88	86	45 - 120	3	78	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 280-292940

Method: 625

Preparation: 625

LCS Lab Sample ID: LCS 280-292940/2-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 09/08/2015 1718
 Prep Date: 08/31/2015 1325
 Leach Date: N/A

Analysis Batch: 280-293958
 Prep Batch: 280-292940
 Leach Batch: N/A
 Units: mg/L
 Instrument ID: SMS_Y
 Lab File ID: Y5231.D
 Initial Weight/Volume: 1000 mL
 Final Weight/Volume: 1 mL
 Injection Volume: 0.5 uL

LCSD Lab Sample ID: LCSD 280-292940/3-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 09/08/2015 1745
 Prep Date: 08/31/2015 1325
 Leach Date: N/A

Analysis Batch: 280-293958
 Prep Batch: 280-292940
 Leach Batch: N/A
 Units: mg/L
 Instrument ID: SMS_Y
 Lab File ID: Y5232.D
 Initial Weight/Volume: 1000 mL
 Final Weight/Volume: 1 mL
 Injection Volume: 0.5 uL

Analyte	% Rec		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Diethyl phthalate	88	86	59 - 114	3	30	
Dimethyl phthalate	86	85	58 - 112	2	30	
Di-n-butyl phthalate	86	85	57 - 118	2	30	
Di-n-octyl phthalate	83	84	56 - 120	1	30	
Fluoranthene	85	83	58 - 120	2	30	
Fluorene	82	83	59 - 120	1	30	
Hexachlorobenzene	80	78	53 - 120	2	30	
Hexachlorobutadiene	64	67	27 - 116	5	41	
Hexachlorocyclopentadiene	10	10	10 - 120	1	82	J
Hexachloroethane	66	69	40 - 113	5	52	
Indeno[1,2,3-cd]pyrene	79	80	50 - 120	2	73	
Isophorone	84	84	50 - 120	1	30	
Naphthalene	77	80	37 - 120	4	30	
n-Decane	60	65	28 - 120	7	61	
Nitrobenzene	85	87	46 - 120	3	30	
N-Nitrosodimethylamine	87	89	37 - 120	3	30	
N-Nitrosodi-n-propylamine	86	89	50 - 120	3	30	
N-Nitrosodiphenylamine	84	81	46 - 203	4	50	
p-Cresol	87	88	42 - 120	1	39	
Pentachlorophenol	87	86	46 - 120	1	30	
Phenanthrene	85	83	54 - 120	2	30	
Phenol	86	87	37 - 112	2	30	
Pyrene	92	91	55 - 115	1	30	
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
2,4,6-Tribromophenol	102		99		16 - 147	
2-Fluorobiphenyl	95		96		43 - 120	
2-Fluorophenol	102		106		16 - 136	
Nitrobenzene-d5	98		102		52 - 120	
Phenol-d5	106		107		11 - 145	
Terphenyl-d14	104		102		10 - 145	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-292940**

**Method: 625
Preparation: 625**

LCS Lab Sample ID: LCS 280-292940/2-A Units: mg/L
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 09/08/2015 1718
 Prep Date: 08/31/2015 1325
 Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-292940/3-A
 Client Matrix: Water
 Dilution: 1.0
 Analysis Date: 09/08/2015 1745
 Prep Date: 08/31/2015 1325
 Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
1,2,4-Trichlorobenzene	0.0800	0.0800	0.0565	0.0592
1,2-Dichlorobenzene	0.0800	0.0800	0.0562	0.0610
1,3-Dichlorobenzene	0.0800	0.0800	0.0549	0.0574
1,4-Dichlorobenzene	0.0800	0.0800	0.0554	0.0583
2,2'-Oxybis(1-chloropropane)	0.0800	0.0800	0.0680	0.0697
2,4,6-Trichlorophenol	0.0800	0.0800	0.0674	0.0689
2,4-Dichlorophenol	0.0800	0.0800	0.0656	0.0676
2,4-Dimethylphenol	0.0800	0.0800	0.0567	0.0557
2,4-Dinitrophenol	0.160	0.160	0.133	0.137
2,4-Dinitrotoluene	0.0800	0.0800	0.0723	0.0710
2,6-Dinitrotoluene	0.0800	0.0800	0.0706	0.0698
2-Chloronaphthalene	0.0800	0.0800	0.0628	0.0636
2-Chlorophenol	0.0800	0.0800	0.0684	0.0701
2-Methylphenol	0.0800	0.0800	0.0690	0.0700
2-Nitrophenol	0.0800	0.0800	0.0664	0.0678
3,3'-Dichlorobenzidine	0.0800	0.0800	0.0629	0.0601
4,6-Dinitro-2-methylphenol	0.160	0.160	0.139	0.139
4-Bromophenyl phenyl ether	0.0800	0.0800	0.0661	0.0644
4-Chloro-3-methylphenol	0.0800	0.0800	0.0686	0.0684
4-Chlorophenyl phenyl ether	0.0800	0.0800	0.0651	0.0641
4-Nitrophenol	0.160	0.160	0.144	0.143
Acenaphthene	0.0800	0.0800	0.0658	0.0640
Acenaphthylene	0.0800	0.0800	0.0642	0.0625
Anthracene	0.0800	0.0800	0.0679	0.0660
Benzidine	0.0800	0.0800	ND	ND
Benzo[a]anthracene	0.0800	0.0800	0.0727	0.0714
Benzo[a]pyrene	0.0800	0.0800	0.0703	0.0667
Benzo[b]fluoranthene	0.0800	0.0800	0.0722	0.0713
Benzo[g,h,i]perylene	0.0800	0.0800	0.0704	0.0697
Benzo[k]fluoranthene	0.0800	0.0800	0.0767	0.0738
Bis(2-chloroethoxy)methane	0.0800	0.0800	0.0677	0.0681
Bis(2-chloroethyl)ether	0.0800	0.0800	0.0684	0.0697
Bis(2-ethylhexyl) phthalate	0.0800	0.0800	0.0721	0.0724
Butyl benzyl phthalate	0.0800	0.0800	0.0717	0.0715
Chrysene	0.0800	0.0800	0.0736	0.0727
Dibenz(a,h)anthracene	0.0800	0.0800	0.0706	0.0688
Diethyl phthalate	0.0800	0.0800	0.0708	0.0689
Dimethyl phthalate	0.0800	0.0800	0.0688	0.0677
Di-n-butyl phthalate	0.0800	0.0800	0.0692	0.0679

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-292940

Method: 625
Preparation: 625

LCS Lab Sample ID: LCS 280-292940/2-A Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/08/2015 1718
Prep Date: 08/31/2015 1325
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-292940/3-A
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/08/2015 1745
Prep Date: 08/31/2015 1325
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Di-n-octyl phthalate	0.0800	0.0800	0.0666	0.0675
Fluoranthene	0.0800	0.0800	0.0678	0.0662
Fluorene	0.0800	0.0800	0.0659	0.0665
Hexachlorobenzene	0.0800	0.0800	0.0637	0.0623
Hexachlorobutadiene	0.0800	0.0800	0.0510	0.0538
Hexachlorocyclopentadiene	0.0800	0.0800	0.00831 J	0.00837 J
Hexachloroethane	0.0800	0.0800	0.0529	0.0555
Indeno[1,2,3-cd]pyrene	0.0800	0.0800	0.0631	0.0644
Isophorone	0.0800	0.0800	0.0673	0.0668
Naphthalene	0.0800	0.0800	0.0615	0.0641
n-Decane	0.0800	0.0800	0.0484	0.0517
Nitrobenzene	0.0800	0.0800	0.0678	0.0699
N-Nitrosodimethylamine	0.0800	0.0800	0.0693	0.0716
N-Nitrosodi-n-propylamine	0.0800	0.0800	0.0688	0.0708
N-Nitrosodiphenylamine	0.160	0.160	0.134	0.129
p-Cresol	0.0800	0.0800	0.0695	0.0702
Pentachlorophenol	0.160	0.160	0.139	0.137
Phenanthrene	0.0800	0.0800	0.0680	0.0666
Phenol	0.0800	0.0800	0.0684	0.0699
Pyrene	0.0800	0.0800	0.0737	0.0726

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 440-277989**Method: 218.6****Preparation: N/A**

Lab Sample ID:	MB 440-277989/3	Analysis Batch:	440-277989	Instrument ID:	IC-22
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	440-0062518-003.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 0652	Units:	ug/L	Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chromium, hexavalent	ND		0.25	1.0

Lab Control Sample - Batch: 440-277989**Method: 218.6****Preparation: N/A**

Lab Sample ID:	LCS 440-277989/2	Analysis Batch:	440-277989	Instrument ID:	IC-22
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	440-0062518-002.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 0640	Units:	ug/L	Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	50.0	49.1	98	90 - 110	

Method Reporting Limit Check - Batch: 440-277989**Method: 218.6****Preparation: N/A**

Lab Sample ID:	MRL 440-277989/6	Analysis Batch:	440-277989	Instrument ID:	IC-22
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	440-0062518-006.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 0915	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chromium, hexavalent	1.00	1.08	108	50 - 150	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 440-277989****Method: 218.6****Preparation: N/A**

MS Lab Sample ID:	280-73538-I-1 MS	Analysis Batch:	440-277989	Instrument ID:	IC-22
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	440-0062518-014.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2040			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-73538-I-1 MSD	Analysis Batch:	440-277989	Instrument ID:	IC-22
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	440-0062518-015.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2052			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	1000 uL
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chromium, hexavalent	98	98	90 - 110	0	10	H	H

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 440-277989****Method: 218.6****Preparation: N/A**

MS Lab Sample ID:	280-73538-I-1 MS	Units:	ug/L	MSD Lab Sample ID:	280-73538-I-1 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	09/03/2015 2040			Analysis Date:	09/03/2015 2052
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
	Result/Qual				
Chromium, hexavalent	1.5	50.0	50.0	50.4 H	50.4 H

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-293170

Method: 200.7 Rev 4.4

Preparation: 200.7

Total Recoverable

Lab Sample ID:	MB 280-293170/1-A	Analysis Batch:	280-293461	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-293170	Lab File ID:	26b090215.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/02/2015 1940	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Arsenic	ND		0.0044	0.015
Cadmium	ND		0.00045	0.0050
Iron	ND		0.022	0.10
Lead	ND		0.0026	0.0090
Zinc	ND		0.0045	0.020
Silver	ND		0.00093	0.010

Method Blank - Batch: 280-293170

Method: 200.7 Rev 4.4

Preparation: 200.7

Total Recoverable

Lab Sample ID:	MB 280-293170/1-A	Analysis Batch:	280-293766	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-293170	Lab File ID:	26a090415.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/04/2015 1727	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Selenium	ND		0.0049	0.015

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Lab Control Sample - Batch: 280-293170

Method: 200.7 Rev 4.4

Preparation: 200.7

Total Recoverable

Lab Sample ID:	LCS 280-293170/2-A	Analysis Batch:	280-293461	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-293170	Lab File ID:	26b090215.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/02/2015 1943	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				
Leach Date	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1.00	0.990	99	88 - 110	
Cadmium	0.100	0.101	101	88 - 111	
Iron	1.00	0.986	99	89 - 115	
Lead	0.500	0.498	100	89 - 110	
Zinc	0.500	0.494	99	85 - 111	
Silver	0.0500	0.0491	98	85 - 115	

Lab Control Sample - Batch: 280-293170

Method: 200.7 Rev 4.4

Preparation: 200.7

Total Recoverable

Lab Sample ID:	LCS 280-293170/2-A	Analysis Batch:	280-293766	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-293170	Lab File ID:	26a090415.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/04/2015 1729	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				
Leach Date	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Selenium	2.00	2.10	105	85 - 112	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-293170**

Method: 200.7 Rev 4.4

Preparation: 200.7

Total Recoverable

MS Lab Sample ID:	280-73540-F-1-B MS	Analysis Batch:	280-293461	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-293170	Lab File ID:	26b090215.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/03/2015 0351			Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				
Leach Date:	N/A				

MSD Lab Sample ID:	280-73540-F-1-C MSD	Analysis Batch:	280-293461	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-293170	Lab File ID:	26b090215.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/03/2015 0354			Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Arsenic	102	104	88 - 110	2	20		
Cadmium	97	100	88 - 111	3	20		
Iron	51	89	89 - 115	4	20	4	4
Lead	89	90	89 - 110	1	20		
Zinc	102	104	85 - 111	2	20		
Silver	106	110	85 - 115	4	20		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-293170**

Method: 200.7 Rev 4.4

Preparation: 200.7

Total Recoverable

MS Lab Sample ID:	280-73540-F-1-B MS	Analysis Batch:	280-293766	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-293170	Lab File ID:	26a090415.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/04/2015 1743			Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				
Leach Date:	N/A				

MSD Lab Sample ID:	280-73540-F-1-C MSD	Analysis Batch:	280-293766	Instrument ID:	MT_026
Client Matrix:	Water	Prep Batch:	280-293170	Lab File ID:	26a090415.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	09/04/2015 1746			Final Weight/Volume:	50 mL
Prep Date:	09/02/2015 0830				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Selenium	106	106	85 - 112	0	20		

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-293170

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID: 280-73540-F-1-B MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/03/2015 0351
Prep Date: 09/02/2015 0830
Leach Date: N/A

MSD Lab Sample ID: 280-73540-F-1-C MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/03/2015 0354
Prep Date: 09/02/2015 0830
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Arsenic	0.066	1.00	1.00	1.08	1.11
Cadmium	ND	0.100	0.100	0.0972	0.0997
Iron	9.3	1.00	1.00	9.80 4	10.2 4
Lead	0.0040 J	0.500	0.500	0.449	0.456
Zinc	0.089	0.500	0.500	0.598	0.608
Silver	ND	0.0500	0.0500	0.0529	0.0549

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-293170

Method: 200.7 Rev 4.4
Preparation: 200.7
Total Recoverable

MS Lab Sample ID: 280-73540-F-1-B MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/04/2015 1743
Prep Date: 09/02/2015 0830
Leach Date: N/A

MSD Lab Sample ID: 280-73540-F-1-C MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/04/2015 1746
Prep Date: 09/02/2015 0830
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Selenium	0.000880	2.00	2.00	2.12	2.12

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-294320

Method: 245.1

Preparation: 245.1

Lab Sample ID:	MB 280-294320/1-A	Analysis Batch:	280-294585	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-294320	Lab File ID:	150911bb.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	09/11/2015 1728	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	09/11/2015 1000				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	ND	^	0.000027	0.00020

Lab Control Sample - Batch: 280-294320

Method: 245.1

Preparation: 245.1

Lab Sample ID:	LCS 280-294320/2-A	Analysis Batch:	280-294585	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-294320	Lab File ID:	150911bb.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	09/11/2015 1731	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	09/11/2015 1000				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00457	91	90 - 110	^

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-294320

Method: 245.1

Preparation: 245.1

MS Lab Sample ID:	280-73838-B-1-K MS	Analysis Batch:	280-294585	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-294320	Lab File ID:	150911bb.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	09/11/2015 1749			Final Weight/Volume:	50 mL
Prep Date:	09/11/2015 1000				
Leach Date:	N/A				

MSD Lab Sample ID:	280-73838-B-1-L MSD	Analysis Batch:	280-294585	Instrument ID:	MT_034
Client Matrix:	Water	Prep Batch:	280-294320	Lab File ID:	150911bb.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	09/11/2015 1751			Final Weight/Volume:	50 mL
Prep Date:	09/11/2015 1000				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Mercury	110	123	80 - 120	11	10	^	F1 ^ F2

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-294320**

**Method: 245.1
Preparation: 245.1**

MS Lab Sample ID: 280-73838-B-1-K MS Units: mg/L
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/11/2015 1749
Prep Date: 09/11/2015 1000
Leach Date: N/A

MSD Lab Sample ID: 280-73838-B-1-L MSD
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/11/2015 1751
Prep Date: 09/11/2015 1000
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Mercury	ND	0.00500	0.00500	0.00552 ^	0.00615 F1 ^ F

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-294542

Method: 1664A

Preparation: 1664A

Lab Sample ID:	MB 280-294542/3-A	Analysis Batch:	280-294576	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	280-294542	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/11/2015 2243	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	09/11/2015 1703				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
HEM	ND		1.6	5.0

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-294542

Method: 1664A

Preparation: 1664A

LCS Lab Sample ID:	LCS 280-294542/1-A	Analysis Batch:	280-294576	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	280-294542	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/11/2015 2243	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	09/11/2015 1703				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-294542/2-A	Analysis Batch:	280-294576	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	280-294542	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/11/2015 2243	Units:	mg/L	Final Weight/Volume:	1000 mL
Prep Date:	09/11/2015 1703				
Leach Date:	N/A				

Analyte	LCS	LCSD	% Rec.	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
HEM	101	95		78 - 114	6	18		

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-294542

Method: 1664A

Preparation: 1664A

LCS Lab Sample ID:	LCS 280-294542/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-294542/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	09/11/2015 2243			Analysis Date:	09/11/2015 2243
Prep Date:	09/11/2015 1703			Prep Date:	09/11/2015 1703
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
HEM	40.0	40.0	40.5	38.1

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-293226

Method: 350.1

Preparation: N/A

Lab Sample ID:	MB 280-293226/112	Analysis Batch:	280-293226	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E\FLOW_4\090115.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	09/01/2015 1953	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Ammonia	ND		0.022	0.10

Lab Control Sample/ Lab Control Sample Duplicate Recovery Report - Batch: 280-293226

Method: 350.1

Preparation: N/A

LCS Lab Sample ID:	LCS 280-293226/110	Analysis Batch:	280-293226	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E\FLOW_4\090115.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	09/01/2015 1949	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-293226/111	Analysis Batch:	280-293226	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E\FLOW_4\090115.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	09/01/2015 1951	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
Ammonia	97	97	90 - 110	1	10	

Laboratory Control/ Laboratory Duplicate Data Report - Batch: 280-293226

Method: 350.1

Preparation: N/A

LCS Lab Sample ID:	LCS 280-293226/110	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-293226/111
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	09/01/2015 1949			Analysis Date:	09/01/2015 1951
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Ammonia	2.50	2.50	2.42	2.44

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-293226****Method: 350.1
Preparation: N/A**

MS Lab Sample ID:	280-73564-C-7 MS	Analysis Batch:	280-293226	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E\FLOW_4\090115.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	09/01/2015 1957			Final Weight/Volume:	10 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-73564-C-7 MSD	Analysis Batch:	280-293226	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	E\FLOW_4\090115.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	09/01/2015 1959			Final Weight/Volume:	10 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Ammonia	137	136	90 - 110	0	10	F1	F1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-293226****Method: 350.1
Preparation: N/A**

MS Lab Sample ID:	280-73564-C-7 MS	Units:	mg/L	MSD Lab Sample ID:	280-73564-C-7 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	09/01/2015 1957			Analysis Date:	09/01/2015 1959
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
	Result	Qual			Result	Qual	Result	Qual
Ammonia	0.033	J	1.00	1.00	1.40	F1	1.40	F1

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-294405

Method: 351.2

Preparation: 351.2

Lab Sample ID:	MB 280-294405/3-A	Analysis Batch:	280-294572	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-294405	Lab File ID:	091115TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	09/11/2015 1911	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	09/10/2015 1934				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Nitrogen, Kjeldahl	ND		0.18	0.50

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-294405** **Method: 351.2**
Preparation: 351.2

LCS Lab Sample ID:	LCS 280-294405/1-A	Analysis Batch:	280-294572	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-294405	Lab File ID:	091115TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	09/11/2015 1909	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	09/10/2015 1934				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-294405/2-A	Analysis Batch:	280-294572	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-294405	Lab File ID:	091115TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	09/11/2015 1910	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	09/10/2015 1934				
Leach Date:	N/A				

Analyte	LCS	LCSD	% Rec.	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Nitrogen, Kjeldahl	97	98		90 - 110	0	25		

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-294405** **Method: 351.2**
Preparation: 351.2

LCS Lab Sample ID:	LCS 280-294405/1-A	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-294405/2-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	09/11/2015 1909			Analysis Date:	09/11/2015 1910
Prep Date:	09/10/2015 1934			Prep Date:	09/10/2015 1934
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Nitrogen, Kjeldahl	6.00	6.00	5.84	5.86

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-294405****Method: 351.2
Preparation: 351.2**

MS Lab Sample ID:	280-73497-D-1-B MS	Analysis Batch:	280-294572	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-294405	Lab File ID:	091115TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	09/11/2015 1914			Final Weight/Volume:	25 mL
Prep Date:	09/10/2015 1934				
Leach Date:	N/A				

MSD Lab Sample ID:	280-73497-D-1-C MSD	Analysis Batch:	280-294572	Instrument ID:	WC_Astoria
Client Matrix:	Water	Prep Batch:	280-294405	Lab File ID:	091115TKN.tab
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	09/11/2015 1915			Final Weight/Volume:	25 mL
Prep Date:	09/10/2015 1934				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Nitrogen, Kjeldahl	86	87	90 - 110	1	25	F1	F1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-294405****Method: 351.2
Preparation: 351.2**

MS Lab Sample ID:	280-73497-D-1-B MS	Units:	mg/L	MSD Lab Sample ID:	280-73497-D-1-C MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	09/11/2015 1914			Analysis Date:	09/11/2015 1915
Prep Date:	09/10/2015 1934			Prep Date:	09/10/2015 1934
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Nitrogen, Kjeldahl	ND	3.00	3.00	2.59 F1	2.61 F1

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-294191**Method: 353.2****Preparation: N/A**

Lab Sample ID:	MB 280-294191/105	Analysis Batch:	280-294191	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\090915.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	09/09/2015 1541	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Nitrate Nitrite as N	ND		0.019	0.10

Method Reporting Limit Check - Batch: 280-294191**Method: 353.2****Preparation: N/A**

Lab Sample ID:	MRL 280-294191/20	Analysis Batch:	280-294191	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\090915.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	09/09/2015 1251	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N	0.0500	0.0479	96	50 - 150	J

Lab Control Sample - Batch: 280-294191**Method: 353.2****Preparation: N/A**

Lab Sample ID:	LCS 280-294191/104	Analysis Batch:	280-294191	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\090915.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	09/09/2015 1539	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N	5.00	4.97	99	90 - 110	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-294191

Method: 353.2

Preparation: N/A

MS Lab Sample ID:	280-73538-2	Analysis Batch:	280-294191	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\090915.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/09/2015 1545			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-73538-2	Analysis Batch:	280-294191	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\090915.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/09/2015 1547			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Nitrate Nitrite as N	95	96	90 - 110	0	10		

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-294191

Method: 353.2

Preparation: N/A

MS Lab Sample ID:	280-73538-2	Units:	mg/L	MSD Lab Sample ID:	280-73538-2
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	09/09/2015 1545			Analysis Date:	09/09/2015 1547
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS		MSD Result/Qual
				Result/Qual	Amount	
Nitrate Nitrite as N	2.5	4.00	4.00	6.29	6.32	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-293112

Method: 365.1

Preparation: 365.2/365.3/365

Lab Sample ID:	MB 280-293112/4-A	Analysis Batch:	280-293174	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-293112	Lab File ID:	090115TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.0 mL
Analysis Date:	09/01/2015 1743	Units:	mg/L	Final Weight/Volume:	50.0 mL
Prep Date:	09/01/2015 1329				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phosphorus, Total	ND		0.0050	0.050

Lab Control Sample - Batch: 280-293112

Method: 365.1

Preparation: 365.2/365.3/365

Lab Sample ID:	LCS 280-293112/3-A	Analysis Batch:	280-293174	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-293112	Lab File ID:	090115TPHOS.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.0 mL
Analysis Date:	09/01/2015 1743	Units:	mg/L	Final Weight/Volume:	50.0 mL
Prep Date:	09/01/2015 1329				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec	Limit	Qual
Phosphorus, Total	0.500	0.530	106	90 - 110	

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-293112

Method: 365.1

Preparation: 365.2/365.3/365

MS Lab Sample ID:	280-73538-2	Analysis Batch:	280-293174	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-293112	Lab File ID:	090115TPHOS.xls
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	50.0 mL
Analysis Date:	09/01/2015 1809			Final Weight/Volume:	50.0 mL
Prep Date:	09/01/2015 1329				
Leach Date:	N/A				

MSD Lab Sample ID:	280-73538-2	Analysis Batch:	280-293174	Instrument ID:	WC_Konelab
Client Matrix:	Water	Prep Batch:	280-293112	Lab File ID:	090115TPHOS.xls
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	50.0 mL
Analysis Date:	09/01/2015 1809			Final Weight/Volume:	50.0 mL
Prep Date:	09/01/2015 1329				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Phosphorus, Total	88	106	90 - 110	3	10	4	4

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 280-293112

Method: 365.1
Preparation: 365.2/365.3/365

MS Lab Sample ID: 280-73538-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 09/01/2015 1809
Prep Date: 09/01/2015 1329
Leach Date: N/A

Units: mg/L

MSD Lab Sample ID: 280-73538-2
Client Matrix: Water
Dilution: 5.0
Analysis Date: 09/01/2015 1809
Prep Date: 09/01/2015 1329
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Phosphorus, Total	2.7	0.500	0.500	3.09 4	3.18 4

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-292918

Method: 410.4

Preparation: N/A

Lab Sample ID:	MB 280-292918/5	Analysis Batch:	280-292918	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2 mL
Analysis Date:	08/31/2015 0945	Units:	mg/L	Final Weight/Volume:	2 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Chemical Oxygen Demand	ND		4.1	20

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-292918** **Method: 410.4**
Preparation: N/A

LCS Lab Sample ID:	LCS 280-292918/3	Analysis Batch:	280-292918	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2015 0945	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-292918/4	Analysis Batch:	280-292918	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2015 0945	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	LCS	LCSD	% Rec.	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Chemical Oxygen Demand	96	98		90 - 110	2	11		

**Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-292918** **Method: 410.4**
Preparation: N/A

LCS Lab Sample ID:	LCS 280-292918/3	Units:	mg/L	LCSD Lab Sample ID:	LCSD 280-292918/4
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	08/31/2015 0945			Analysis Date:	08/31/2015 0945
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chemical Oxygen Demand	100	100	95.8	98.1

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-292918****Method: 410.4****Preparation: N/A**

MS Lab Sample ID:	280-73537-D-1 MS	Analysis Batch:	280-292918	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2015 0945			Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-73537-D-1 MSD	Analysis Batch:	280-292918	Instrument ID:	WC_HACH SPEC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2015 0945			Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chemical Oxygen Demand	98	94	90 - 110	2	11		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-292918****Method: 410.4****Preparation: N/A**

MS Lab Sample ID:	280-73537-D-1 MS	Units:	mg/L	MSD Lab Sample ID:	280-73537-D-1 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	2.0			Dilution:	2.0
Analysis Date:	08/31/2015 0945			Analysis Date:	08/31/2015 0945
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
	Result/Qual				
Chemical Oxygen Demand	140	100	100	233	229

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-292749**Method: SM 2540D****Preparation: N/A**

Lab Sample ID:	MB 280-292749/2	Analysis Batch:	280-292749	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/28/2015 1622	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Total Suspended Solids	ND		1.1	4.0

Lab Control Sample - Batch: 280-292749**Method: SM 2540D****Preparation: N/A**

Lab Sample ID:	LCS 280-292749/1	Analysis Batch:	280-292749	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/28/2015 1622	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Suspended Solids	100	86.8	87	86 - 114	

Duplicate - Batch: 280-292749**Method: SM 2540D****Preparation: N/A**

Lab Sample ID:	680-116168-E-9 DU	Analysis Batch:	280-292749	Instrument ID:	No Equipment Assigned
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	250 mL
Analysis Date:	08/28/2015 1622	Units:	mg/L	Final Weight/Volume:	250 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Suspended Solids	2.4 J	2.00	18	10	J F5

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Method Blank - Batch: 280-295143

Method: Total Nitrogen

Preparation: N/A

Lab Sample ID: MB 280-295143/1
Client Matrix: Water
Dilution: 1.0
Analysis Date: 09/16/2015 1125
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 280-295143
Prep Batch: N/A
Leach Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Result	Qual	MDL	RL
Nitrogen, Total	ND		0.042	0.10

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Laboratory Chronicle

Lab ID: 280-73538-2

Client ID: W GSL-DB01E / W GSL-DB01W

Sample Date/Time: 08/24/2015 09:40 Received Date/Time: 08/27/2015 09:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:625	280-73538-D-2-A		280-293958	280-292940	08/31/2015 13:25	1	TAL DEN	MJM
A:625	280-73538-D-2-A		280-293958	280-292940	09/09/2015 02:09	1	TAL DEN	AFH
A:218:6	280-73538-I-2		440-277989		09/03/2015 21:04	1	TAL IRV	RW
P:200:7	280-73538-H-2-A		280-293461	280-293170	09/02/2015 08:30	1	TAL DEN	SUR
A:200:7 Rev 4.4	280-73538-H-2-A		280-293461	280-293170	09/02/2015 19:50	1	TAL DEN	LMT
P:200:7	280-73538-H-2-A		280-293766	280-293170	09/02/2015 08:30	1	TAL DEN	SUR
A:200:7 Rev 4.4	280-73538-H-2-A		280-293766	280-293170	09/04/2015 17:34	1	TAL DEN	LMT
P:245:1	280-73538-H-2-B		280-294585	280-294320	09/11/2015 10:00	1	TAL DEN	CMK
A:245:1	280-73538-H-2-B		280-294585	280-294320	09/11/2015 17:40	1	TAL DEN	CMK
P:1664A	280-73538-B-2-A		280-294576	280-294542	09/11/2015 17:03	1	TAL DEN	ARS
A:1664A	280-73538-B-2-A		280-294576	280-294542	09/11/2015 22:43	1	TAL DEN	ARS
A:350:1	280-73538-G-2		280-293226		09/01/2015 20:29	1	TAL DEN	CML
P:351:2	280-73538-F-2-A		280-294572	280-294405	09/10/2015 19:34	1	TAL DEN	MW1
A:351:2	280-73538-F-2-A		280-294572	280-294405	09/11/2015 19:24	1	TAL DEN	MW1
A:353:2	280-73538-G-2		280-294191		09/09/2015 15:43	1	TAL DEN	RSN
P:365:2/365:3/365	280-73538-G-2-A		280-293174	280-293112	09/01/2015 13:29	5	TAL DEN	AJS
A:365:1	280-73538-G-2-A		280-293174	280-293112	09/01/2015 18:09	5	TAL DEN	AJS
A:410:4	280-73538-F-2		280-292918		08/31/2015 09:45	1	TAL DEN	CCJ
A:SM 2540D	280-73538-E-2		280-292749		08/28/2015 16:22	1	TAL DEN	MW1
A:Total Nitrogen	280-73538-A-2		280-295143		09/16/2015 11:25	1	TAL DEN	AJA

Lab ID: 280-73538-2 MS

Client ID: W GSL-DB01E / W GSL-DB01W

Sample Date/Time: 08/24/2015 09:40 Received Date/Time: 08/27/2015 09:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:353:2	280-73538-G-2 MS		280-294191		09/09/2015 15:45	1	TAL DEN	RSN
P:365:2/365:3/365	280-73538-G-2-B MS		280-293174	280-293112	09/01/2015 13:29	5	TAL DEN	AJS
A:365:1	280-73538-G-2-B MS		280-293174	280-293112	09/01/2015 18:09	5	TAL DEN	AJS

Lab ID: 280-73538-2 MSD

Client ID: W GSL-DB01E / W GSL-DB01W

Sample Date/Time: 08/24/2015 09:40 Received Date/Time: 08/27/2015 09:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:353:2	280-73538-G-2 MSD		280-294191		09/09/2015 15:47	1	TAL DEN	RSN
P:365:2/365:3/365	280-73538-G-2-C		280-293174	280-293112	09/01/2015 13:29	5	TAL DEN	AJS
A:365:1	280-73538-G-2-C		280-293174	280-293112	09/01/2015 18:09	5	TAL DEN	AJS

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Laboratory Chronicle

Lab ID: MB

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst	
P.625	MB 280-292940/1-A	280-293958	280-292940	08/31/2015 13:25	1	TAL DEN	MJM		
A.625	MB 280-292940/1-A	280-293958	280-292940	09/08/2015 16:51	1	TAL DEN	AFH		
A.218.6	MB 440-277989/3	440-277989			09/03/2015 06:52	1	TAL IRV	RW	
P.200.7	MB 280-293170/1-A	280-293461	280-293170	09/02/2015 08:30	1	TAL DEN	SUR		
A.200.7 Rev 4.4	MB 280-293170/1-A	280-293461	280-293170	09/02/2015 19:40	1	TAL DEN	LMT		
P.200.7	MB 280-293170/1-A	280-293766	280-293170	09/02/2015 08:30	1	TAL DEN	SUR		
A.200.7 Rev 4.4	MB 280-293170/1-A	280-293766	280-293170	09/04/2015 17:27	1	TAL DEN	LMT		
P.245.1	MB 280-294320/1-A	280-294585	280-294320	09/11/2015 10:00	1	TAL DEN	CMK		
A.245.1	MB 280-294320/1-A	280-294585	280-294320	09/11/2015 17:28	1	TAL DEN	CMK		
P.1664A	MB 280-294542/3-A	280-294576	280-294542	09/11/2015 17:03	1	TAL DEN	ARS		
A.1664A	MB 280-294542/3-A	280-294576	280-294542	09/11/2015 22:43	1	TAL DEN	ARS		
A.350.1	MB 280-293226/112	280-293226			09/01/2015 19:53	1	TAL DEN	CML	
P.351.2	MB 280-294405/3-A	280-294572	280-294405	09/10/2015 19:34	1	TAL DEN	MW1		
A.351.2	MB 280-294405/3-A	280-294572	280-294405	09/11/2015 19:11	1	TAL DEN	MW1		
A.353.2	MB 280-294191/105	280-294191			09/09/2015 15:41	1	TAL DEN	RSN	
P.365.2/365.3/365.5	MB 280-293112/4-A	280-293174	280-293112	09/01/2015 13:29	1	TAL DEN	AJS		
A.365.1	MB 280-293112/4-A	280-293174	280-293112	09/01/2015 17:43	1	TAL DEN	AJS		
A.410.4	MB 280-292918/5	280-292918			08/31/2015 09:45	1	TAL DEN	CCJ	
A.SM 2540D	MB 280-292749/2	280-292749			08/28/2015 16:22	1	TAL DEN	MW1	
A.Total Nitrogen	MB 280-295143/1	280-295143			09/16/2015 11:25	1	TAL DEN	AJA	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Laboratory Chronicle

Lab ID: LCS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst	
P.625	LCS 280-292940/2-A	280-293958	280-292940	08/31/2015 13:25	1	TAL DEN	MJM		
A.625	LCS 280-292940/2-A	280-293958	280-292940	09/08/2015 17:18	1	TAL DEN	AFH		
A.218.6	LCS 440-277989/2	440-277989			09/03/2015 06:40	1	TAL IRV	RW	
P.200.7	LCS 280-293170/2-A	280-293461	280-293170	09/02/2015 08:30	1	TAL DEN	SUR		
A.200.7 Rev 4.4	LCS 280-293170/2-A	280-293461	280-293170	09/02/2015 19:43	1	TAL DEN	LMT		
P.200.7	LCS 280-293170/2-A	280-293766	280-293170	09/02/2015 08:30	1	TAL DEN	SUR		
A.200.7 Rev 4.4	LCS 280-293170/2-A	280-293766	280-293170	09/04/2015 17:29	1	TAL DEN	LMT		
P.245.1	LCS 280-294320/2-A	280-294585	280-294320	09/11/2015 10:00	1	TAL DEN	CMK		
A.245.1	LCS 280-294320/2-A	280-294585	280-294320	09/11/2015 17:31	1	TAL DEN	CMK		
P.1664A	LCS 280-294542/1-A	280-294576	280-294542	09/11/2015 17:03	1	TAL DEN	ARS		
A.1664A	LCS 280-294542/1-A	280-294576	280-294542	09/11/2015 22:43	1	TAL DEN	ARS		
A.350.1	LCS 280-293226/110	280-293226			09/01/2015 19:49	1	TAL DEN	CML	
P.351.2	LCS 280-294405/1-A	280-294572	280-294405	09/10/2015 19:34	1	TAL DEN	MW1		
A.351.2	LCS 280-294405/1-A	280-294572	280-294405	09/11/2015 19:09	1	TAL DEN	MW1		
A.353.2	LCS 280-294191/104	280-294191			09/09/2015 15:39	1	TAL DEN	RSN	
P.365.2/365.3/365.5	LCS 280-293112/3-A	280-293174	280-293112	09/01/2015 13:29	1	TAL DEN	AJS		
A.365.1	LCS 280-293112/3-A	280-293174	280-293112	09/01/2015 17:43	1	TAL DEN	AJS		
A.410.4	LCS 280-292918/3	280-292918			08/31/2015 09:45	1	TAL DEN	CCJ	
A.SM 2540D	LCS 280-292749/1	280-292749			08/28/2015 16:22	1	TAL DEN	MW1	

Lab ID: LCSD

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst	
P.625	LCSD 280-292940/3-A	280-293958	280-292940	08/31/2015 13:25	1	TAL DEN	MJM		
A.625	LCSD 280-292940/3-A	280-293958	280-292940	09/08/2015 17:45	1	TAL DEN	AFH		
P.1664A	LCSD 280-294542/2-A	280-294576	280-294542	09/11/2015 17:03	1	TAL DEN	ARS		
A.1664A	LCSD 280-294542/2-A	280-294576	280-294542	09/11/2015 22:43	1	TAL DEN	ARS		
A.350.1	LCSD 280-293226/111	280-293226			09/01/2015 19:51	1	TAL DEN	CML	
P.351.2	LCSD 280-294405/2-A	280-294572	280-294405	09/10/2015 19:34	1	TAL DEN	MW1		
A.351.2	LCSD 280-294405/2-A	280-294572	280-294405	09/11/2015 19:10	1	TAL DEN	MW1		
A.353.2	LCSD 280-294191/22	280-294191			09/09/2015 12:55	1	TAL DEN	RSN	
A.410.4	LCSD 280-292918/4	280-292918			08/31/2015 09:45	1	TAL DEN	CCJ	

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Laboratory Chronicle

Lab ID: MRL

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:218.6	MRL 440-277989/6		440-277989		09/03/2015 09:15	1	TAL IRV	RW
A:353.2	MRL 280-294191/20		280-294191		09/09/2015 12:51	1	TAL DEN	RSN

Lab ID: MS

Client ID: N/A

Sample Date/Time: 08/24/2015 09:25 Received Date/Time: 08/27/2015 09:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:218.6	280-73538-I-1 MS		440-277989		09/03/2015 20:40	1	TAL IRV	RW
P:200.7	280-73540-F-1-B MS		280-293461	280-293170	09/02/2015 08:30	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-73540-F-1-B MS		280-293461	280-293170	09/03/2015 03:51	1	TAL DEN	LMT
P:200.7	280-73540-F-1-B MS		280-293766	280-293170	09/02/2015 08:30	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-73540-F-1-B MS		280-293766	280-293170	09/04/2015 17:43	1	TAL DEN	LMT
P:245.1	280-73838-B-1-K MS		280-294585	280-294320	09/11/2015 10:00	1	TAL DEN	CMK
A:245.1	280-73838-B-1-K MS		280-294585	280-294320	09/11/2015 17:49	1	TAL DEN	CMK
A:350.1	280-73564-C-7 MS		280-293226		09/01/2015 19:57	1	TAL DEN	CML
P:351.2	280-73497-D-1-B MS		280-294572	280-294405	09/10/2015 19:34	1	TAL DEN	MW1
A:351.2	280-73497-D-1-B MS		280-294572	280-294405	09/11/2015 19:14	1	TAL DEN	MW1
A:410.4	280-73537-D-1 MS		280-292918		08/31/2015 09:45	2	TAL DEN	CCJ

Lab ID: MSD

Client ID: N/A

Sample Date/Time: 08/24/2015 09:25 Received Date/Time: 08/27/2015 09:40

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:218.6	280-73538-I-1 MSD		440-277989		09/03/2015 20:52	1	TAL IRV	RW
P:200.7	280-73540-F-1-C MSD		280-293461	280-293170	09/02/2015 08:30	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-73540-F-1-C MSD		280-293461	280-293170	09/03/2015 03:54	1	TAL DEN	LMT
P:200.7	280-73540-F-1-C MSD		280-293766	280-293170	09/02/2015 08:30	1	TAL DEN	SUR
A:200.7 Rev 4.4	280-73540-F-1-C MSD		280-293766	280-293170	09/04/2015 17:46	1	TAL DEN	LMT
P:245.1	280-73838-B-1-L MSD		280-294585	280-294320	09/11/2015 10:00	1	TAL DEN	CMK
A:245.1	280-73838-B-1-L MSD		280-294585	280-294320	09/11/2015 17:51	1	TAL DEN	CMK
A:350.1	280-73564-C-7 MSD		280-293226		09/01/2015 19:59	1	TAL DEN	CML
P:351.2	280-73497-D-1-C MSD		280-294572	280-294405	09/10/2015 19:34	1	TAL DEN	MW1
A:351.2	280-73497-D-1-C MSD		280-294572	280-294405	09/11/2015 19:15	1	TAL DEN	MW1
A:410.4	280-73537-D-1 MSD		280-292918		08/31/2015 09:45	2	TAL DEN	CCJ

Quality Control Results

Client: Waste Management

Job Number: 280-73538-2

Laboratory Chronicle

Lab ID: DU

Client ID: N/A

Sample Date/Time: 08/22/2015 16:00 Received Date/Time: 08/28/2015 09:20

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2540D	680-116168-E-9 DU		280-292749		08/28/2015 16:22	1	TAL DEN	MW1

Lab References:

TAL DEN = TestAmerica Denver

TAL IRV = TestAmerica Irvine

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Honolulu

4429 Malaa St. #104

Honolulu, HI 96818

Tel: 808-486-5227

TestAmerica Job ID: HYH0076

Client Project/Site: [none]

Client Project Description: AECOM, W GSL STORMWATER

For:

TestAmerica Denver

4955 Yarrow Street

Arvada, CO 80002

Attn: Betsy Sara



Authorized for release by:

9/11/2015 6:07:45 PM

Craig O. Pilialoha, Project Manager

808-486-5227

Craig.Pilialoha@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Case Narrative

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Job ID: HYH0076

Laboratory: TestAmerica Honolulu

Narrative

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory unless otherwise stated in the report. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. TestAmerica Analytical Testing Corporation certifies that the analytical results contained herein apply only to the specific sample(s) analyzed.

The Chain(s) of Custody are included and are an integral part of this report. This entire report was reviewed and approved for release.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-(808)486-5227

LABORATORY REPORT

At sample receipt, the cooler/sample was 14.4 degrees C.

TestAmerica has determined that samples which require thermal preservation shall be considered acceptable if the arrival temperature is within 2 degrees C of the required temperature or the method specified range. For samples with a temperature requirement of 4 degrees C, an arrival temperature from 0 degrees C to 6 degrees C meets specifications. Samples that are delivered to the laboratory on the same day that they are collected may not meet these criteria. In these cases, the samples are considered acceptable if there is evidence that the chilling process has begun, such as arrival on ice.

Sample Summary

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
HYH0076-01	DB01-E	Water - NonPotable	08/24/15 09:40	08/24/15 11:56

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TestAmerica Honolulu

Detection Summary

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Client Sample ID: DB01-E

Lab Sample ID: HYH0076-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
BOD - 5 Day	4.88		2.00		mg/L	1.00		SM5210B	Total

This Detection Summary does not include radiochemical test results.

TestAmerica Honolulu

Client Sample Results

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Client Sample ID: DB01-E
Date Collected: 08/24/15 09:40
Date Received: 08/24/15 11:56

Lab Sample ID: HYH0076-01
Matrix: Water - NonPotable

Method: SM5210B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	4.88		2.00		mg/L		08/24/15 20:03	08/29/15 16:51	1.00

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TestAmerica Honolulu

QC Sample Results

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Method: SM5210B - General Chemistry Parameters

Lab Sample ID: 15H0072-BLK1

Matrix: Water - NonPotable

Analysis Batch: 15H0072

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 15H0072_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	ND		2.00		mg/L		08/24/15 19:37	08/29/15 16:06	1.00

Lab Sample ID: 15H0072-BS1

Matrix: Water - NonPotable

Analysis Batch: 15H0072

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 15H0072_P

%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
BOD - 5 Day	198	207		mg/L		104	85 - 115

Lab Sample ID: 15H0072-DUP1

Matrix: Water - NonPotable

Analysis Batch: 15H0072

Client Sample ID: Duplicate

Prep Type: Total

Prep Batch: 15H0072_P

RPD

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
BOD - 5 Day	4.34		4.33		mg/L		0.2	20

QC Association Summary

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

WetChem

Analysis Batch: 15H0072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0072-BLK1	Method Blank	Total	Water - NonPotable	SM5210B	15H0072_P
15H0072-BS1	Lab Control Sample	Total	Water - NonPotable	SM5210B	15H0072_P
15H0072-DUP1	Duplicate	Total	Water - NonPotable	SM5210B	15H0072_P
HYH0076-01	DB01-E	Total	Water - NonPotable	SM5210B	15H0072_P

Prep Batch: 15H0072_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0072-BLK1	Method Blank	Total	Water - NonPotable	Default Prep	GenChem
15H0072-BS1	Lab Control Sample	Total	Water - NonPotable	Default Prep	GenChem
15H0072-DUP1	Duplicate	Total	Water - NonPotable	Default Prep	GenChem
HYH0076-01	DB01-E	Total	Water - NonPotable	Default Prep	GenChem

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Lab Chronicle

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Client Sample ID: DB01-E

Date Collected: 08/24/15 09:40

Date Received: 08/24/15 11:56

Lab Sample ID: HYH0076-01

Matrix: Water - NonPotable

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	Default Prep GenChem		1.00	15H0072_P	08/24/15 20:03	JMC	TAL HON
Total	Analysis	SM5210B		1.00	15H0072	08/29/15 16:51	JMC	TAL HON

Laboratory References:

TAL HON = TestAmerica Honolulu, 4429 Malaa St. #104, Honolulu, HI 96818, TEL 808-486-5227

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Certification Summary

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Laboratory: TestAmerica Honolulu

All certifications held by this laboratory are listed. Not all certifications are applicable to this report

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		HON-S-206	01-31-18

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Method Summary

Client: TestAmerica Denver
Project/Site: [none]

TestAmerica Job ID: HYH0076

Method	Method Description	Protocol	Laboratory
SM5210B	General Chemistry Parameters		TAL HON

Protocol References:

Laboratory References:

TAL HON = TestAmerica Honolulu, 4429 Malaa St. #104, Honolulu, HI 96818, TEL 808-486-5227

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*Chain of
Custody Record*

Temperature on Receipt -

Drinking Water? Yes *No*

THE ICAADEB IN ENVIRONMENTAL TESTING

TestAmerica

9600 ft MSL

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-73538-2

Login Number: 73538

List Source: TestAmerica Denver

List Number: 1

Creator: White, Denise E

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 280-73538-2

Login Number: 73538

List Number: 2

Creator: Ornelas, Olga

List Source: TestAmerica Irvine

List Creation: 09/02/15 02:20 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Storm Water Sampling Form
Waimanalo Gulch Sanitary Landfill
Storm Water Pollution Control Plan

Sampling Location: DB01-E		Date: 8/24/15		
		Project Number: 60338427.03.01		
Sampling Personnel: AM, DD				
Weather Conditions: raining				
Start date/time of the storm event: over night	End date/time of the storm event: on going	Duration since previous rainfall greater than 0.1 inches: > 3 days		
Observations/Comments:				
Instrument	Manufacturer	Model	Serial No.	Calibration Date and Time
pH Meter	Eutech	pH104	JC007629	8/24, 0900
Calibration results: 6.99 @ pH 7.0				
Comments:				
Time at Start of Rain: over night	Time of First Run-off: early morning			
Sample Collection Method: bags, composite				
Flow-Measurement Method: ruler				
Describe: measured flow over weir				
Sample Appearance: cloudy	Odor: none	Color: light brown		
Floating Debris: no	Scum or Foam: no	Oil Sheen: no		
SAMPLE NUMBER	TIME SAMPLED	pH	Temp (°C)	FLOW MEASUREMENTS (incl. time) in.
A	0940	8.42	25.3	4"
B	0955	8.32	25.1	3.5"
C	10:00	8.53	25.6	3.75"
D	10:25	8.39	26.0	3.5"
Comments:				
<u>Flow</u> A = 4" = 1.3 cfs B = 3.5" = 1.05 cfs C = 3.75" = 1.175 cfs D = 3.5" = 1.05 cfs				

